REMARKS

Claim 1 has been amended to recite that the coating layer covering the core particles of the first composition of the solid preparation for dialysis of the present invention contains (a) 0 to 50% by weight of sodium chloride and (b) 100 to 50% by weight of one or more electrolytes selected from the group consisting of calcium chloride, magnesium chloride, potassium chloride and sodium acetate. This amendment overcomes the 35 U.S.C. § 112, second paragraph, rejection.

Claims 1, 8 and 9 have been amended to recite that the first composition and the second composition are each granulated into granules having an average particle diameter of 300 to 1,700 μm. Support for this amendment is found in the specification in the sentence bridging pages 11 and 12.

The amendments to claims 1, 8 and 9 overcome the 35 U.S.C. § 102 rejections of the claims and place the claims in condition for allowance.

In the present invention, a composition containing electrolytes except for sodium bicarbonate (first composition) and a composition containing sugar (second composition) are separately

formed and subsequently mixed with an acid to produce an "A" preparation of a double preparation type sodium bicarbonate solid preparation for dialysis (refer to page 5, second paragraph). The first and second compositions are separately granulated and mixed with an acid to form an "A" preparation which is excellent in content homogeneity, shows no decomposition and coloration of glucose and is excellent in long-term preservation stability (refer to page 23, second paragraph).

In a conventional wet method for producing a solid dialysis preparation, glucose is easily colored by sodium acetate (alkali), humidity and heat immediately after producing the preparation and while preserving the same. However, the second composition of the preparation of the present invention comprises core particles comprising particles of a sugar, the core particles being covered with a coating layer comprising said sugar or a different sugar, the second composition being granulated into granules having an average particle diameter of 300 to 1,700μm. Contact of the sugar with alkali components is avoided by the preparation of separate granules compared to mixing these components together. Further,

the time required to granulate them separately is shortened as compared to mixing them together so as to make stable compositions.

In the conventional dry method for producing solid dialysis preparation, the content homogeneity of glucose is inferior because the glucose is fairly immiscible with other components (refer to page 4, second paragraph). In the present invention, the particle diameter of the second composition is increased to be similar to the particle diameter of the first composition. This enables these compositions to be mix homogeneously. The reason why the core sugar particle is covered with a coating of the same sugar or different sugar is to increase the particle diameter of the second composition to be similar to that of the first composition.

The Office is respectfully requested to refer to Example 1 and Comparative Examples 1 and 2 (page 21, Table 1 and page 22, Table 2). Comparative Example 1 is a wet granulation method, and Comparative Example 2 is a dry granulation method. In Example 1, the particle diameter of the first composition is 500 μm and that of the second composition is also 500 μm. The present invention shows excellent homogeneity and stability.

Referring to the cited references, Aoyama discloses a granular to fine-granular dry mix powder comprising sodium chloride, potassium chloride, calcium chloride, magnesium chloride and sodium acetate as electrolyte compounds. In Example 3, column 8, of the Aoyama reference, sodium chloride is heated to 73°C and mixed with potassium chloride, and then, calcium chloride and magnesium chloride under heating. Further, the pure water and sodium acetate are charged into the electrolyte mixture and mixed under heating. Then, glucose is added to the mixture and the heating and mixing are further continued, whereby the system gains further viscosity. The obtained dried free-flowing granular to fine granular powder is shown in Fig. 1 in the reference.

In Example 3 of Aoyama, the glucose is not granulated into granules having an average particle diameter of 300 to 1,700 μm. It is believed that the glucose is adhered with sodium acetate on the surface of the electrolytes produced in the precedent stage because they are mixed and heated. And, as the glucose is heated under mixing, it will be colored by heat. Although the Office indicates that Aoyama's glucose reads on instant claims, the state of the glucose in the solid powders are different from each other.

Aoyama neither describes nor suggests that the second composition, i.e., sugar that is granulated into granules having an average particle diameter of 300 to 1,700 μm to form a homogeneous and stable solid dialysis preparation. Aoyama is insufficient to support the 35 U.S.C. § 102 rejection and removal of the rejection is in order.

EP 0399918 is a corresponding patent application of Japanese Patent Publication Nos. 2749375 and 2751933 and Japanese Patent Unexamined Publication No. Hei 3-38527 described on page 3, lines 7-15, of the present application and identified in the Information Disclosure Statement filed July 22, 2002.

The blood dialysis preparation in Japanese Patent Publication No. 2749375 comprises a first powdery composition consisting of electrolytes and liquid acid, and a second powdery composition consisting of sodium bicarbonate and glucose.

The blood dialysis preparation in Japanese Patent Publication No. 2751933 comprises a first powdery composition consisting of electrolytes, glucose and liquid acid, and a second powdery composition consisting of sodium bicarbonate.

The blood dialysis preparation in Japanese Patent Unexamined Publication No. Hei 3-38527 comprises a first powdery composition consisting of inorganic salts, glucose, sodium acetate and acetic acid, and a second powdery composition consisting of sodium bicarbonate and sodium acetate.

In the first invention (No. 2749375), glucose is pulverized by a pin mill and then, mixed with sodium bicarbonate. In the second invention (No. 2751933), glucose is mixed by stirring with sodium chloride, potassium chloride, magnesium chloride and sodium acetate and liquid acid and then pulverized by a pin mill, and finally granulated. In the third invention (No. Hei 3-38527), glucose is also mixed by stirring with sodium chloride, potassium chloride, calcium chloride, magnesium chloride and sodium acetate, pulverized by a pin mill and granulated.

In Example 3 in EP 0399918, glucose is pulverized by a pin mill and mixed by stirring with sodium bicarbonate, and pelletized with a role compacter. In Example Nos. 7, 12 and 16 in EP 0399918, glucose is mixed by stirring with electrolytes including sodium chloride, potassium chloride, calcium chloride, magnesium chloride and sodium acetate. In Example Nos. 8, 13 and 17, glucose and

sodium chloride are mixed by stirring to obtain granules, and are sprayed with aqueous solution containing electrolytes.

In these examples, glucose itself is not granulated to form granules having an average particle diameter of 300 to 1,700 μm. An average particle diameter of the second composition which is preferably similar to that in the first composition is important. An average particle diameter of glucose (without a coating) is usually less than 300 μm, for instance, 180 μm as in Example 1 (page 16) of the present application.

In Comparative Example 1 in the present application, glucose is mixed with sodium chloride, potassium chloride, magnesium chloride, calcium chloride and sodium acetate and further, mixed with water and dried. Subsequently, the mixture is mixed with glacial acetic acid to form a solid preparation having an average particle diameter of 350 μm. However, the preparation does not have a homogeneous content of glucose (see, Table 1, page 21) and shows coloration after preservation (see, Table 2, page 22).

In Comparative Example 2 in the present application, water is not used as in Comparative Example 1 but glucose and electrolytes are mixed and pulverized to particles having an average particle

diameter of 50 μm. Subsequently, the particles are mixed with glacial acetic acid to form solid preparation having an average particle diameter of 500 μm. However, the preparation does not have a homogeneous content of glucose (see, Table 1, page 21).

From these comparative examples, it is apparent that the present invention is also superior to the solid preparation in EP 0399918. EP 0399918 neither discloses nor suggests the present invention, especially, the second composition in the present invention. Removal of the 35 U.S.C. § 102 rejection over EP 0399918 is also in order.

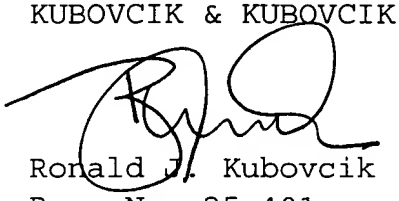
The foregoing is believed to be a complete and proper response to the Office Action dated May 29, 2003, and is believed to place this application in condition for allowance. If, however, minor issues remain that can be resolved by means of a telephone interview, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number indicated below.

In the event that this paper is not considered to be timely filed, applicants hereby petition for an appropriate extension of time. The fee for any such extension may be charged to our Deposit Account No. 111833.

In the event any additional fees are required, please also charge our Deposit Account No. 111833.

Respectfully submitted,

KUBOVCIK & KUBOVCIK



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